-THE PHANTOM ROAD TESTED

Well it's 5 am and the phone rings with an early morning call, I drag me self out of bed after nearly telling the wide awake telephone operator what she could do with her phone call and proceeded to get up Right I think to myself today's the day I actually get to see the Phantom in operation. Anyway after quite a while on the road I finally reached Bradford,(it was quite easy to tell it was Bradford by all the curry houses) and found Trilogics shop. After having quite a nice discussion on how the club was doing and how both the club and Trilogic could work more closely in the future it was time to see what the PHANTOM could do.

For new members or people who have'nt heard about the Phantom here is a quick explanation of what it is. Well as anyone will tell you the major trouble with the 1541 disk drive is A) Its slow, I mean Ive seen snails with messages written on their backs moving information faster. B) Commodore say it intelligent, well the Irish say that about themselves as well. C) To make just ordinary simple disk commands like reading the error channel needs either additional harware or software.

So whats the alternative, take speed for example the main reason the 1541 is so slow is because of its use of the serial port. I mean when ever you want to talk to the drive either loading or saving the information is being transfered at a rate of 1 bit at a time, and seeing 8 bits make a byte you can see why it is so slow.

Some of the ways this problem as been overcome is to speed up the rate of transfere to 2 bits at a time giving an increase of roughly 5 times normal. There as been a few attempts to speed this up even more through the serial bus, but to do this what is necessary is to remove all the error checking and retrying if the drive detects a slight error, and if an error does occure you will undoubtedly get a miss load. What the Phantom both is and does is quite simple. Firstly what it is, the Phantom is made up of two subassembly boards, one which fits inside your 1541, and one which fits inside of your C64. The fitting procedures of which are extremely well documented in the operating manual supplied. I mean whilst I was at Trilogic they let me fit a Phantom in a drive and in about 10 minutes it was up and running perfectly. There is just one word of caution though, on some of the early C64s the kernal chip is soldered in and it does need to be removed and a chip base fitted in its place.(THIS IS BEST LEFT TO SOMEONE WHO KNOWS WHAT THEY ARE DOING, ALSO IF POSSIBLE ENSURE THAT THE CHIP BASE IS NOT WHAT IS CALLED A TURN PIN TYPE)

Now the benefits of the Phantom, remember what I said about the speed at which data is transfered, either 1 or 2 bits at a time, well the Phantom connects directly to the user port to allow Paralell communication between the drive and the computer, and that means that it can both transmit and receive 8 bits of information at one time, in other words 1 byte. This gives an average speed increase of between 25 to 60 times faster loading and saving depending on what other features of the Phantom board you have turned on.

Here are a few example times on both disk based software and standard files. (D/V = DISK VERSION. P/F = PROG FILE)

TITLE	FILESIZE	PHANTOM TIME	
Law of the west	D/V	14	seconds
Rock and Wrestle	P/F 244 BL	6.5	seconds.
Silent sevice	D/V	50	seconds
Uridium	P/F 198 BL	5	seconds

Some of the really nice things I like about the phantom are some of the new routines built into the DOS and additional things built into the new kernal. Firstly the DOS, just look at a few of the new commands below.

@N: Header,id+ - format 40 tracks

@S: Filename - Scratch a file - upto 5 filenames can be scratche once.

@ V:I - Validate & ignore read errors.

@ V:L - Validate & learn read errors.

@ FL: - Lock file - upto 5 files can be locked at once

@ 1: - Loads from tape

@ Q: - Disable function keys.

@ WI: - Ignores write protect

@ WC: - Ignores write protect until disk change.

And the commands go on and on. Well I've only really just started scratching the surface of what the Phantom can do, you've got built in block read block write commands, and what must be about the most powerful built in drive monitor I've came across. Again which is accessible by very simple commands.

Well in all I must be honest and say that I was very impressed with what the Phantom can do, and it certainly turns the snail into a cheetah as far as speed is concerned. So if you've been considering buying a new Paralell operating system for your 1541 this as got to be the one.

Price £78.95

At the moment its only available for the 1541. NOT the 1541c or any other Commodoer drive. If you do wish to purchase one then contact Trilogic first as when I was there they had a 10 day delivery time on a Phantom.